



White Sands Science Symposium

Thursday June 7th, 2012
Mesilla Valley Days Inn & Suites
Columbus Conference Center
901 Avenida de Mesilla
Las Cruces, New Mexico



- 9:00 Dennis Vasquez
Welcoming Address
- 9:12 Showing of the White Sands National Monument movie "A Land in Motion". 2012
Winner at the International Wildlife Film Festival for *Best Government Agency* film
- 9:30 Gary Kocurek
Exploring Aeolian Sand Dunes at White Sands Using Airborne LiDAR
- 9:45 Eric Metzler
The Remarkable Endemism of Moths at White Sands National Monument
- 10:00 Elizabeth Walsh
Zooplankton Diversity at White Sands National Monument: potential cryptic speciation
in Lake Lucero
- 10:15 Doug Burkett
Natural Resource Management at White Sands Missile Range
- 10:30 Break
- 10:45 Miguel Dominguez Acosta
The White Sands as a Dust Emission Hotspot
- 11:00 Erica Rosenblum
Ecological Speciation in White Sands Lizards
- 11:15 Rip Langford
Sediment Sources and Transport Within Parts of the White Sands Dune Field
- 11:30 David Lightfoot
Arthropod Inventory Survey of White Sands National Monument and Cuatrociénegas
Protected Area
- 11:45 Rick LoBello
Challenges, and Successes in Protecting the Northern Chihuahuan Desert

- 12:00 Lunch
- 1:30 Talon Newton
Hydrologic Investigation at White Sands National Monument: Preliminary Results
- 1:45 Raleigh Martin
Linking Wind, Sediment Transport, Vegetation, and Groundwater to Explain Dune Field Evolution at White Sands
- 2:00 Adrian Unc
Inventory of Soil Microbial and Other Soil Faunal Ecosystem Components at the White Sands National Monument and Guadalupe Mountains National Park
- 2:15 Quinn Robinson
Mesocarnivore Distributional Patterns at White Sands National Monument
- 2:30 Mihaela Glamoclija
Geomicrobiology of the Aeolian Environments at White Sands National Monument
- 2:45 Break
- 3:00 Anna Szyrkiewicz
Geochemical and Hydrological Processes Controlling Gypsum Deposition in White Sands
- 3:15 Curtis Monger
Biomineralization and Carbon Sequestration by Microorganism at the White Sands National Monument
- 3:30 Thomas Schmugge
Space Observations of the White Sands and Their Potential Use to Study Surface Water Dynamics
- 3:45 Ivo Garcia
Cuatrociénegas and White Sands: a successful international cooperation experience
- 4:00 Poster Session
- 5:00 Adjourn

Lizard drawings by Simone DesRoches

POSTER PRESENTATIONS

Catherine Borer
Calcium Partitioning and
Sequestration in Foliage from Plants
at White Sands National
Monument: strategies for calcium
tolerance

David Bustos
Newest Palentological Findings at
White Sands National Monument

Bill Conrod
Capture and Removal of African
Oryx from White Sands NM

Simone DesRoches
Beyond Black and White:
comparative ecomorphology of
three rapidly evolving lizard species
in White Sands

Ryan C. Ewing
Constructing the Dune-field Pattern
at White Sands

Richard Greene
Cultural Resources at White Sands
National Monument

Kayla Hardwick
An Experimental Test of the
Adaptive Value of White Color in
White Sands Lizards

Philip Sudman
Historical Biogeography of the
Desert Pocket Gopher (*Geomys
arenarius*) as Inferred from AFLP
DNA Analyses

Anna Suggs
NASA Remote Sensing Earth Science
Teacher Program at White Sands.
(student based research project)

Mara Weisenberger
Restoring Big Game Habitat with
Landscape-scale Prescribed Fire

James Witcher
Geothermal Resources Framework
and Potential Uses in the Tularosa
and Hueco Basins, New Mexico